DOCUMENT RESUME

ED 445 474 EC 308 081

AUTHOR	Kaye, H. Stephen
TITLE	Disability and the Digital Divide. Disability Statistics Abstract Number 22.
INSTITUTION	California Univ., San Francisco. Disability Statistics Center.
SPONS AGENCY	National Inst. on Disability and Rehabilitation Research (ED/OSERS), Washington, DC.
PUB DATE	2000-07-00
NOTE	5p.
CONTRACT	H133B30002
AVAILABLE FROM	U.S. Dept. of Education OSERS/NIDRR, Room 3431, FB6, Washington, DC 20202. Tel: 202-205-5633 (Voice); Tel: 800-877-8339 (Toll Free/TDD); available in alternative format on request. For full text: http://www.ed.gov/offices/OSERS/NIDRR/pubs.html.
PUB TYPE	Information Analyses (070) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Adolescents; Adults; Age Differences; *Computers; *Disabilities; Economic Status; Educational Attainment; Family Characteristics; Family Income; *Internet; Minority Groups; National Surveys; Older Adults; *Predictor Variables; Racial Differences
IDENTIFIERS	*Access to Computers

ABSTRACT

This report discusses findings from the Current Population Survey of 1998 that found Americans with disabilities are less than half as likely as their counterparts to own a computer, and they are about one-quarter as likely to use the Internet. Others findings indicate: (1) among persons 65 years of age or older, only one-tenth of those with disabilities have computers at home, compared to 25.3 percent of those without disabilities; (2) only 2.2 percent of elderly people with disabilities use the Internet, a rate of about one-quarter that of those without disabilities; (3) among individuals with disabilities ages 15-64, 32.6 percent with disabilities have computers and 15.1 percent use the Internet, compared to 5.6 percent and 42.3 percent of their counterparts without disabilities; (4) only 12.7 percent of people with disabilities who have not graduated from high school own computers, compared with 34.5 percent of those without disabilities; (5) 11 percent of individuals with disabilities with family incomes under $20,000 a year own computers, compared to 22 percent of those without disabilities; and (6) African Americans with disabilities are much less likely than whites to have a computer or to have access to the Internet. (CR)

Reproductions supplied by EDRS are the best that can be made
from the original document.

EC

ED 445 474

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Disability Statistics Abstract

July 2000 / Number 22

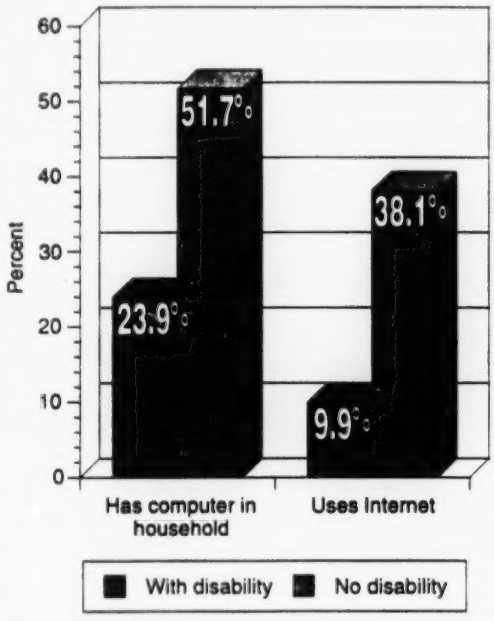
Disability and the Digital Divide

by H. Stephen Kaye

Americans with disabilities are less than half as likely as their non-disabled counterparts to own a computer, and they are about one-quarter as likely to use the Internet. These are the conclusions of a new report[1] on computer ownership and Internet use among people with disabilities, based on December 1998 data from the Current Population Survey, a nationally representative sample of U.S. households. For the purpose of this analysis, disability is defined in terms of a limitation in the ability to work. Those respondents reported to have a "health problem or disability which prevents them from working or which limits the amount or kind of work they can do" are counted as having a disability. The statistics presented in this abstract apply to the population 15 years of age or older.

Computer technology and the Internet have the tremendous potential to broaden the lives and increase the independence of people with disabilities. To a population that is often physically as well as socially isolated, they can offer access to information, social interaction, cultural activities, employment opportunities, and consumer goods. Screen readers can provide blind people with instant access to vast quantities of online information, without having to wait for Braille or audiotape; voice recognition can enable people with limited manual dexterity to write letters, manage their finances, or perform work-related tasks. But, as the data in this abstract demonstrate, very few people with disabilities are able to take advantage of these possibilities.

Figure 1:
Computer ownership and Internet use, by disability status



As shown in Figure 1, just under one-quarter (23.9 percent) of people with disabilities have access to a computer at home, compared to just over half (51.7 percent) of their non-disabled counterparts. The gap in Internet use is even more striking: Only one-tenth (9.9 percent) of people with disabilities connect to the Internet, compared to almost four-tenths (38.1 percent) of those without disabilities.

Elderly people with disabilities are particularly unlikely to make use of these technologies. Among persons 65 years of age or older, only one-tenth (10.6

DSC
Disability Statistics Center
University of California, San Francisco
Published by U.S. Department of Education, National Institute on Disability and Rehabilitation Research (NIDRR).

EC 308081

percent) of those with disabilities have computers at home, compared to one-quarter (25.3 percent) of those without disabilities. And only a tiny fraction (2.2 percent) of elderly people with disabilities use the Internet, a rate about one-quarter that of the non-disabled elderly population (8.9 percent).

Among the non-elderly (aged 15–64), the gaps in access to these technologies are less dramatic but still pronounced: 32.6 percent of those with disabilities have computers and 15.1 percent use the Internet, compared to 55.6 percent and 42.3 percent, respectively, of their counterparts without disabilities.

Educational attainment

The more education a person has, the more likely he or she is to own computer equipment and to use it to connect to the Internet. But regardless of the level of educational attainment, people with disabilities have much lower rates of computer ownership and Internet use than their non-disabled peers (Figure 2).

Only one-eighth (12.7 percent) of people with disabilities who have not graduated from high school own computers. This figure compares with one-third (34.5 percent) of non-high-school-graduates and one-half (49.0 percent) of high school graduates without disabilities, almost half (46.5 percent) of college graduates *with* disabilities, and three-quarters (73.4 percent) of college graduates *without* disabilities.

Only 2.4 percent of people with disabilities who lack high school diplomas use the Internet. Those without disabilities are almost 10 times as likely to connect to the Internet (22.5 percent). People with disabilities who have college degrees have still higher rates of Internet use (30.2 percent); but even this figure is less than half that for college graduates without disabilities, almost two-thirds (63.9 percent) of whom are Internet users.

Family income

People with and without disabilities who have low incomes are much less likely to have access to computer technology than are those with greater financial resources (Figure 3). But regardless of income, people with disabilities own computers significantly less often than do their non-disabled counterparts: half as often for persons with family incomes under $20,000 per year (11.0 percent vs. 22.2 percent), and two-thirds as often for those with family incomes of $20,000 or more (40.0 vs. 61.2 percent).

Within both income groups, use of the Internet also varies significantly by disability status. Only 4.9 percent of people with disabilities who have low family incomes use the Internet, compared to almost four times as high

Figure 2:
Computer and Internet use, by disability status and educational attainment, ages 15 and over

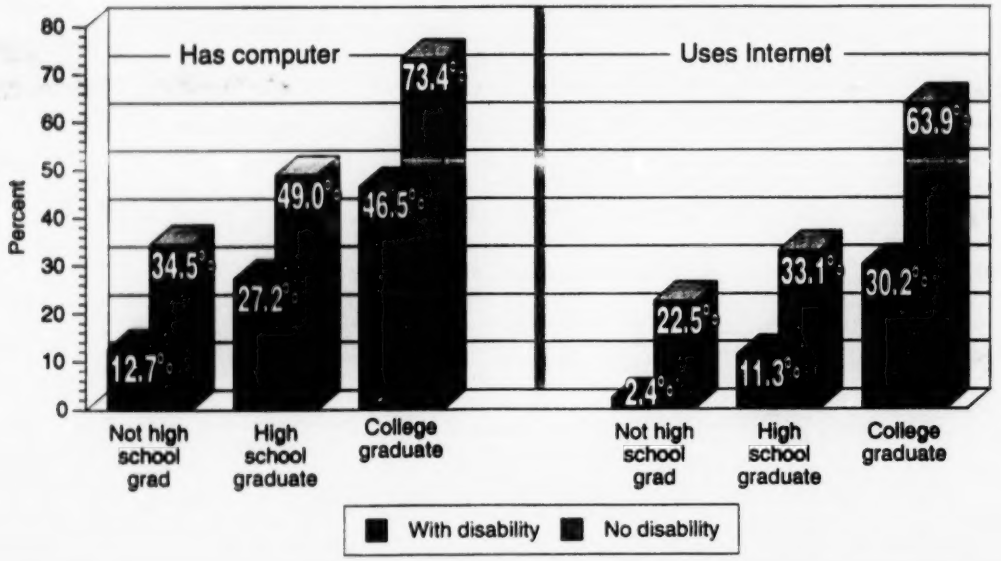
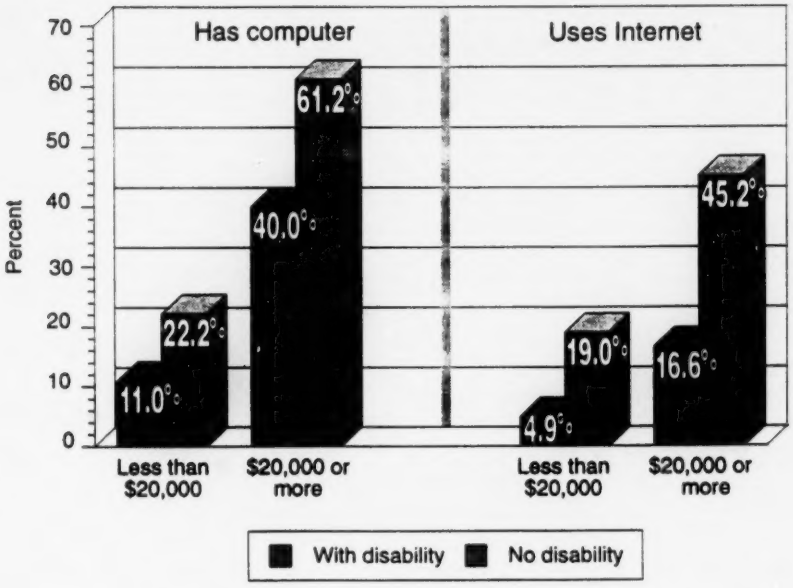


Figure 3:
Computer and Internet use, by disability status and family income, ages 15 and over



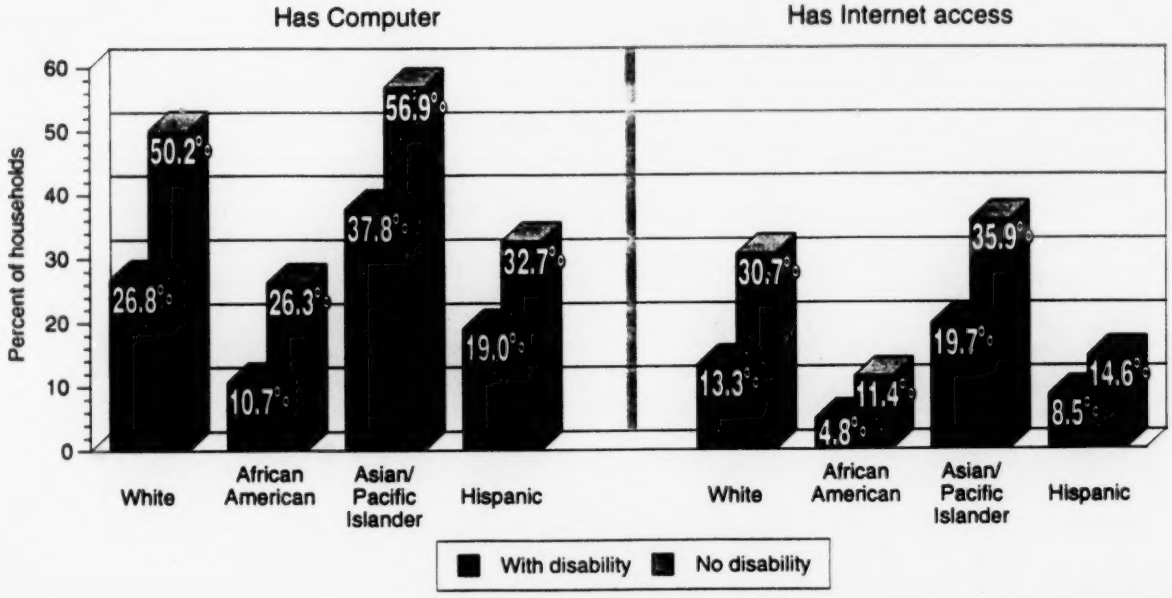
a proportion (19.0 percent) of the non-disabled population. Among people with moderate or high incomes, 16.6 percent of those with disabilities and 45.2 percent of those without disabilities connect to the Internet.

Race and ethnicity

Figure 4 presents statistics on *household* computer ownership and Internet access, broken down into racial and ethnic categories. The race and ethnicity of a household is determined by that of the person in whose name the dwelling is owned or rented; when a household contains one or more members with a disability, it is classified as a household with a disability.

Within each racial and ethnic group, the rate of computer ownership is much less when there is a disability present in the household than when there is not.[2] Among white households, those with dis-

Figure 4:
Household computer ownership and Internet access, by race/ethnicity and disability status of household members



abilities are about half as likely to own computers as are those without (26.8 vs. 50.2 percent). Among African American households, only one-tenth (10.7 percent) of those with disabilities have computers, compared to one-quarter (26.3 percent) of households having no members with disabilities. Some 37.8 percent of Asian and Pacific Islander households with disabilities have computers, compared to 56.9 percent of those without disabilities. And among Latino households, 19.0 percent of those with disabilities have computers, versus 32.7 percent of those with no disability.

There are also large gaps in Internet access within the racial categories.[3] Across the board, households having members with disabilities are roughly half as likely to be connected to the Internet as those with no members with disabilities (for white households, 13.3 vs. 30.7 percent; for black households, 4.8 vs. 11.4 percent; for Asian/Pacific Islander households, 19.7 vs. 35.9 percent).

Among those households with disabilities, African American households are much less likely than white households to have a computer (10.7 vs. 26.8 percent) or to have access to the Internet (4.8 vs. 13.3 percent).[4] It is worth noting that the rates for white households *with* disabilities (26.8 percent of which have computers and 13.3 percent of which have access to the Internet) are roughly equal to those of African American households *without* disabilities (26.3 and 11.4 percent, respectively). Thus, disability and race can be seen to be equally significant factors in determining the household's likelihood of exposure to computer technology.

Notes

[1] Kaye, H.S. (2000). Computer and Internet Use Among People with Disabilities. *Disability Statistics Report (13)*. Washington DC: U.S. Department of Education, National Institute on Disability and Rehabilitation Research.

[2] Because of the small sample size of Native Americans with disabilities, data on computer ownership and Internet use among this population are statistically unreliable and have not been presented in this abstract.

[3] Among Latinos, the difference in Internet access rates between those with and without disabilities is not statistically significant.

[4] Among households with disabilities, differences between whites and Asian/Pacific Islanders and between people of Hispanic and non-Hispanic origin are not statistically significant.

Credits

The Disability Statistics Abstract series is produced by the Disability Statistics Center, Institute for Health & Aging, School of Nursing, University of California, 3333 California St., Suite 340, San Francisco, CA 94118, with funding from NIDRR. World Wide Web address: dsc.ucsf.edu

This report was prepared under ED grant #H133B30002. The views expressed herein are those of the grantee. No official endorsement by the U.S. Department of Education is intended or should be inferred.

Availability

The full text of this public-domain publication is available at the Department's home page at:
www.ed.gov/offices/OSERS/NIDRR/pubs.html

Individuals with disabilities may obtain this document in an alternative format (for example, Braille, large print, audiotape, or computer diskette) on request. For more information, please contact:
U.S. Department of Education
OSERS/NIDRR
Room 3431, FB6
Washington, DC 20202
www.ed.gov/offices/OSERS/NIDRR
E-mail: david_keer@ed.gov
Telephone: (202) 205-5633

Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8 a.m. and 8 p.m. Eastern Time, Monday through Friday.

U.S. DEPARTMENT OF EDUCATION
WASHINGTON, DC 20202

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

Postage & Fees Paid
U.S. Department of Education
Permit No. G-17

BEST COPY AVAILABLE